

2805 Woodstock Rd.
Los Angeles 46, Calif.
Sept. 15, 1964

Mr. Daniel Ellsberg
1400 South Joyce Street
Apt. B 408
Arlington, Virginia

Dear Dan:

Enclosed is a description of the kind I think Harry wanted of work done. It was just dictated off with little reference material at hand. Perhaps you might have some ideas and time to put them down yourself. Or, most important, find out what would really be useful.

Warm regards,



Albert Wohlstetter

AW:rf

Work of Albert Wohlstetter on Arms and Arms Control

Over the past fourteen years he has led a series of research projects on arms and arms control, mostly at RAND, concerned mainly with deterring nuclear attack and lessening the likelihood of "accidental" or irrational or unauthorized acts of war; in the last half of this period, he was concerned also with the problem of reducing damage in case deterrence fails and the need for a wide range of policies to deal with conflicts in third areas.

These studies made basic contributions to: One, the conceptual framework of contemporary arms and arms control policy; Two, the design of hardware now in use; Three, the development of current methods of operation of our strategic forces; and Four, the orientation and research method of systems analysis to day.

1. Conceptual contributions

A. The distinction between first-strike and second-strike capabilities (implicit in RAND Reports R-244-S, Selection of Strategic Air Base Systems; Albert Wohlstetter, Robert Lutz, and Henry S. Rowen; March 1, 1963, and R-266, The Selection and Use of Strategic Air Bases; Albert Wohlstetter, Robert Lutz, Henry S. Rowen, and Frederick Hoffman; March, 1964, and explicit in RAND document D-2270, Defending a Strategic Force After 1960; Albert Wohlstetter and Frederick Hoffman; February, 1964, RAND Report R-290, Protecting Our Power to Strike Back in the 1950's and 1960's; Albert Wohlstetter, Frederick Hoffman, and Henry Rowen; June, 1956, and "The Delicate Balance of Terror"; Albert Wohlstetter; January, 1959.)

B. The theory of deterrence as comparative risk, of an adequate deterrent as one making nuclear attack on our force as the worst of the (possibly large) risks that may be presented to a potential aggressor, of the stability of a deterrent as measured by the shocks or crises it can sustain (D-2270 and RAND Report R-290 and "The Delicate Balance of Terror")

C. The analysis of the intrinsic connection between deterring surprise attack and reducing the chance of accidental war, and the relationship of this to the warning and decision problem and problems of command and control (R-290 and "Nuclear Sharing; NATO And the N+1 Country")

D. The critical role of a protected system of communication, command, and control able to select among several broadly different modes of response in grossly different circumstances of outbreak (RAND Report R-290 also Research Memorandum RM-2373, Objectives of U. S. Military Power; Albert Wohlstetter and Henry S. Rowen; May, 1959)

E. The role of damage limiting and of conventional forces in policies of controlled and selective response (Critique of ORO study of continental defense and Research Memorandum, Objectives of U. S. Military Power)

F. The intrinsic role of deterrence in arms control and disarmament ("The Delicate Balance of Terror")

G. The nature of the Nth country problem and the role of a coherent U. S. policy in reducing national incentives to diffusion, the importance of the distinction between sharing the formation of alliance policy for the contingencies in which the button might be pushed, on the one hand, and, on the other hand, sharing the last minute command or button pushing itself ("Nuclear Sharing: NATO and the N+1 Country")

2. Hardware contributions

A. The bomb alarm system now in use (R-290)

B. The first studies of hardening as a principal mode of protecting strategic vehicles against ballistic missile attack (D-2270 and R-290)

3. Contribution to modes of operation

A. The ground refueling method of operating medium bombers (R-244-S and R-266)

B. The use of ground alert rapid enough to permit fly away with the short warning time available as a principal mode of protection for bombers in the continental United States (R-244-S and R-266 and R-290)

C. The fail-safe procedure for reducing the chance of "accidental" or unauthorized attack (R-290)

4. Contributions to methods of research and systems analysis

A. The reorientation of systems analysis to stress the interaction of systems design and systems analysis, the need to focus on the framing of issues for policy rather than on very elaborate models, and the focus on finding gross differences capable of surviving unfavorable resolutions of the uncertainties, and on the design of systems capable of operating in a variety of contingencies (R-266 and Lecture in Systems Analysis, 1954-55 On this also see the discussion of the "technological breakthrough" in systems analysis in Herman Kahn's On Thermonuclear War, pp. 119 ff., R. D. Specht, "RAND--A Personal View of its History," pp. 836-837, and E. S. Quade, Analysis for Military Decisions, RAND Report R-387-PR, March, 1964)

4. Contributions to methods of research and analysis

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ADW



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